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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
Davis et al

Application No.: 09/697,009

Filed: October 25, 2000

For: DIGITALLY MARKED OBJECTS AND PROMOTIONAL METHODS

Examiner: J. Janvier

Date: May 20, 2004

Art Unit 3622

Confirmation No. 4530

CERTIFICATE OF MAILING

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APPEAL BRIEF

Sir:

This brief is in furtherance of the Notice of Appeal mailed March 22, 2004. Please charge the fee required under 37 CFR 1.17(f) or any deficiency to deposit account 50-1071 (see transmittal letter).

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I. REAL PARTY IN INTEREST

The real party in interest is Digimarc Corporation, by an assignment from the inventors recorded at Reel 11619, Frames 667-68, on March 2, 2001.

II. RELATED APPEALS AND INTERFERENCES

There is no related appeal or interference.

III. STATUS OF CLAIMS

Claim 2 stands finally rejected and appealed. It is reproduced in Appendix A to this Brief.

IV. STATUS OF AMENDMENTS

All earlier-filed amendments have been entered.

(There is an issue concerning the Examiner's failure to consider certain non-patent art that was listed in a September 2003 IDS, which art was earlier considered in the parent application. By a separate paper accompany this Appeal Brief, applicants have requested that the Examiner heed Rule 98(d) and consider such art.)

V. SUMMARY OF THE INVENTION

Applicants' invention concerns context-dependent responses to the detection of digitally watermarked objects.

Digital watermarking is the science of hiding secret information – often in some other data, and without leaving any apparent evidence of data alteration.[1]

Digital watermarking can take many forms - several are detailed in patent documents incorporated-by-reference in the present specification.[2] One form of digital watermarking favored by the present Applicants involves making subtle changes to the luminance of pixels

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[1] Digital watermarking is a well developed art that is not belabored in the present specification. Instead, the present specification incorporates-by-reference earlier patents and applications on the subject, as detailed in fn. 2.

[2] *See, e.g.,* specification, page 1, lines 4-5 and 29-31; and the incorporation by reference language found at

comprising printed artwork (e.g., as may be found on a paper coffee cup or coffee cup jacket[3]) to thereby encode a hidden multi-bit digital data payload. The changes are too slight to be perceptible to human viewers of the indicia. But when such watermark-encoded printed artwork is sensed by a web-cam or the like, and computer analyzed, the encoded digital data can be recovered and a corresponding action can be triggered thereby.

In an illustrative embodiment, a coffee shop distributes coffee in cups (or jacketed cups) that are digitally watermarked to convey digital data.[4] The shop is equipped with a reader terminal to which the cup can be presented.[5] (The reader terminal may be positioned at the condiments counter having cream, sugar, etc., and may be arranged to encourage the consumer to place the cup at a location that is optimized for sensing the digital watermark from the cup, e.g., with a fixed web cam that is part of the terminal.[6])

When the digital data is sensed from the coffee cup, an associated computer system uses this data as an index to a database, which specifies a corresponding response.[7] The response may, for example, be printing a coupon.[8] Thus, by placing the coffee cup within view of the terminal, the customer is issued a coupon.[9]

The claimed arrangement specifies that different reader devices respond differently to the same digitally watermarked object.[10] Continuing the coffee cup example, a reader terminal at the coffee shop may respond to presentation of the digitally watermarked coffee cup by issuing a coupon for a free daily newspaper.[11] If the customer walks down the street and presents the same coffee cup to a reader device at a neighboring bagel shop, the terminal in that store may respond by issuing a coupon for a free cream cheese spread on a purchased bagel.[12]

A great variety of different implementations of the claimed arrangement can be made. For example, prizes may be awarded upon visiting a specified circuit of locations. Showing a

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page 5, lines 5-6.

3 *See, e.g.*, specification, page 2, lines 1-2.

4 *See, e.g.*, specification, page 2, lines 16-17.

5 *See, e.g.*, specification, page 2, lines 17-18.

6 *See, e.g.*, specification, page 2, lines 18-20.

7 *See, e.g.*, specification, page 2, lines 21-24.

8 *See, e.g.*, specification, page 2, line 26.

9 *See, e.g.*, specification, page 3, lines 2-3.

10 Claim 2.

11 *See, e.g.*, specification, page 3, lines 14-21.

coffee cup to each of the Starbucks stores in a city may result in the award of a $20 gift certificate when the last one is visited.[13]

The coffee cup is but one example of an object that can be digitally watermarked. Essentially any object can be so marked, including clothing – such as a t-shirt.[14] Thus, a Habitat for Humanity t-shirt may be encoded with digital data. If a person wearing it is sensed by a terminal at Starbucks, a first type of premium may be issued. If the person wears the same t-shirt to Mrs. Fields' Cookies, a second type of premium may be awarded.[15]

Additional information is provided in the Detailed Description, which is only four pages long and can be quickly read.

VI. ISSUES

1. Did the Office establish *prima facie* obviousness of claim 2 over Barnett (6,321,208) in view of "Official Notice" when:

- the Examiner declined to substantiate the Official Notice when so-requested;
- the Official Notice – if accepted – does not redress the shortcomings of Barnett; and
- none of the art suggests the selective modifications and combinations needed to yield the claimed combination?

VII. GROUPING OF CLAIMS

There is a single claim; no groupings apply.

VIII. ARGUMENT

Claim 2 stands rejected over Barnett (6,321,208) in view of Official Notice.

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12 *See, e.g.*, specification, page 3, lines 21-22.
13 *See, e.g.*, specification, page 3, lines 26-28.
14 *See, e.g.*, specification, page 3, lines 29-31.
15 *See, e.g.*, specification, page 3, line 31 to page 4, line 2.

1. Barnett

Barnett is a system allowing consumers to download and print desired coupons in their home. (User demographic data and coupon selection data is provided back to the coupon issuers for subsequent marketing analyses.)

The appealed claim 2 reads:

> *2. A method comprising:*
> *presenting a digitally watermarked object to a reader device at a first location, and triggering a first response thereby;*
> *presenting the object to a reader device at a second location, and triggering a second, different, response thereby;*
> *wherein at least one of said responses comprises the issuance of a coupon.*

In the Final Rejection, the Examiner correctly notes that Barnett:

- fails to teach digital watermarking of any object; and
- fails to teach triggering two different responses when an object is read at two locations.[16]

As a preliminary matter, it should be recognized that these failings make Barnett a poor choice as the sole reference document in an obviousness rejection. Apparently its only relevance to the claim is issuing a coupon.

2. Official Notice

For every limitation in the claim except "issuance of a coupon," the Examiner has relied on "Official Notice."

In response to both the First Action, and the Final Action, applicants requested that the Examiner cite particular art supporting the Official Notice, so that such art could be particularly addressed in this Appeal Brief.

The Examiner consistently refused.

Applicants note that the Examiner's position puts them in the untenable position of having to prove a negative (i.e., the absence of a teaching in the art). This is an unfair burden

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[16] Final Rejection, page 7.

that neither the law, regulations, nor MPEP, sanctions. Indeed – the burden in an obviousness rejection rests on the Examiner.

Section 2144.03 of the MPEP discusses Official Notice. Among its observations is that the facts of which such Notice may be taken should serve to "fill the gaps" which might otherwise exist in an evidentiary showing "*and should not comprise the principal evidence upon which a rejection is based.*"

In the present case, Official Notice is placed in the *principal* role – allegedly meeting all of the claim language except the last four words.

Applicants correctly raised the deficiency of the Official Notice during prosecution.[17] The MPEP states:

> If applicant does not seasonably traverse the well known statement during examination, then the object of the well known statement is taken to be admitted prior art. *A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution."*

Applicants made the requisite "demand for evidence" that constitutes the seasonable challenge.

In view of the foregoing, the Examiner has failed to establish a *prima facie* showing under Section 103. Accordingly, the rejection should be reversed.

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[17] In the July 28, 2003 Amendment applicants stated:

"The 'Official Notice' on which the Office relies is not believed to redress the shortcomings of Barnett. The rationale provided by the Office to adopt some of Barnett's teachings, modify others, and disregard still others, so as to yield the arrangement of claim 2 is not believed to meet the Office's burden under Section 103, but instead appears based on hindsight reconstruction.

If the rejection is renewed, the Office is requested to cite particular art supporting the subject matter of which 'Official Notice' is taken, so that same can be more particularly addressed in the appeal brief."

Applicants reiterated this request in their Response After Final:

"*Applicants renew their request for information particularly supporting the assertions that the Examiner makes concerning prior art under 'Official Notice.' Moreover, the Examiner notes two deficiencies in Barnett's teachings:*

- *Barnett does not explicitly disclose digitally watermarking an object (coupon); and*
- *Barnett does not explicitly disclose triggering two different responses when the object is read at two locations.*

Yet the Examiner's assertions concerning Official Notice purport to address only Barnett's failure to disclose digital watermarking. The art, and the Action, are silent concerning the second bulleted deficiency.

Given this unresolved deficiency in the rejection, applicants submit that the Office has not met its prima facie burden under Section 103."

3. **If Accepted, the Official Notice Does Not Redress the Shortcomings of Barnett**

Barnett was conceded by the Examiner to have two shortcomings. It:

- fails to teach digital watermarking of any object; and
- fails to teach triggering two different responses when an object is read at two locations.[18]

The "Official Notice" offered by the Examiner purports to address the former. However, it is silent on the latter.[19]

Accordingly, even if the assertions offered by the Examiner in lieu of prior art documents are accepted, there is no teaching of triggering two different responses when an object is read at two locations.

Since the alleged prior art must teach or suggest all of the claim limitations, the Examiner has failed to establish a *prima facie* case under Section 103. The rejection must thus be reversed.

4. **None Of The Art Suggests The Selective Modifications And Combinations Needed To Yield The Claimed Combination**

The rejection of claim 2 is premised on hindsight reconstruction, evidently based on knowledge gleaned only from Applicants' disclosure.

Barnett does not provide any teaching or suggestion that would have led an artisan to devise a method in which digitally watermarked objects are presented at different locations and trigger different responses.

To redress this deficiency, the Examiner devised his own art and weaved his own theory, extrapolating from Barnett's limited teachings precisely the arrangement claimed by applicants. But such imaginings by the Examiner do not fulfill the statutory requirements for obviousness, which call for a cognizable motivation to combine references. Those requirements are not met here.

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[18] Final Rejection, page 7.

[19] Final Rejection, pages 7-8. (Much of the language in the rejection does not concern any limitation of the claim, and is believed to be superfluous.)

Absent impermissible use of Applicants' disclosure as a guide, there is no evidence that an artisan would have selectively adopted certain of Barnett's teachings, modified others, and disregarded still others, in the manner asserted by the Examiner.

Again, the Examiner has failed to meet his burden on one of the essential requirements for a rejection under Section 103.

IX. CONCLUSION

The Examiner failed to establish many facets of a *prima facie* case. He failed to cite supporting art (after repeated requests). His asserted - but undocumented - art failed to redress Barnett's admitted shortcomings. And he failed to establish a cognizable rationale for the proposed combination of references.

Accordingly, the Board is requested to rule that claim 2 should be passed to issuance.

Respectfully submitted,

DIGIMARC CORPORATION

Date: May 20, 2004

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APPENDIX A

CLAIMS

1. (Canceled)

2. A method comprising:

presenting a digitally watermarked object to a reader device at a first location, and triggering a first response thereby;

presenting the object to a reader device at a second location, and triggering a second, different, response thereby;

wherein at least one of said responses comprises the issuance of a coupon.

3. (Withdrawn)

4. (Canceled)